NM2-4

March 2009 Evaporation pond GW Sampling, Treatment Zone Sampling,

Date 5/29/2009

AES Animas Environmental Services, LLC

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May 29, 2009

Brandon Powell
New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

RE: Results of March 2009 Evaporation Pond Groundwater Sampling and Treatment Zone Soil Sampling at BMG's Centralized Surface Waste Management Facility, Rio Arriba County, New Mexico

Dear Mr. Powell:

On March 25, 2009, Animas Environmental Services, LLC (AES), completed quarterly groundwater and soil treatment zone monitoring and sampling at the Benson-Montin-Greer Drilling Corporation (BMG) Centralized Surface Waste Management Facility, located near the Canada Ojitos Unit (COU) Gas Plant in Rio Arriba County, New Mexico. The Centralized Surface Waste Management Facility is located off of Forest Rd 313 in the NW ¼ NW¼ Section 20, T25N, R1E, Rio Arriba County, New Mexico.

1.0 BMG Evaporation Pond Groundwater Monitoring and Sampling

1.1 Site Information

On April 14, 2008, AES personnel confirmed the presence of liquid within the interstitial well (IW) at the BMG Evaporation Pond. Site investigation activities conducted in May 2008 confirmed that while the primary liner had failed, the integrity of the secondary liner was not compromised, and no release to the environment had occurred. As a precautionary measure, New Mexico Oil Conservation Division (NMOCD) requested that four groundwater monitoring wells (MW-1 through MW-4) be installed around the evaporation pond and monitored quarterly in conjunction with on-going landfarm sampling. BMG installed a replacement 69 mil HDPE primary liner over the existing secondary liner around September 15, 2008. The BMG Evaporation Pond is located at the BMG Centralized Surface Waste Management Facility to the northeast of the shop and office area. A site map is included as Figure 1.

1.2 Groundwater Monitoring Well Sampling

AES personnel completed groundwater monitoring and sampling of the evaporation pond monitoring wells on March 25, 2009. Groundwater samples were collected from MW-1 through MW-4 and IW. All samples were analyzed at Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico.

Groundwater samples were collected with disposable bailers and transferred into appropriate sample containers, labeled accordingly, and documented on Water Sample

Collection Forms. The Chain of Custody Record was then completed, and samples were transported to the analyzing laboratory in chilled and insulated coolers at less than 6°C.

All groundwater analytical samples were submitted to Hall for analysis of the following parameters:

- Benzene, toluene, ethylbenzene, and xylene (BTEX) – EPA Method 8021B;
- Total Petroleum Hydrocarbons (TPH) – Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Motor Oil Range Organics (MRO) – EPA Method 8015B;
- Chlorides – EPA Method 300.0;
- Total Dissolved Solids (TDS) – SM 2540C.

1.2.1 Groundwater Measurement Data

Prior to sample collection, AES measured depth to water and recorded temperature, pH, conductivity, and oxidation-reduction potential (ORP) measurements for each well. All data was recorded onto Water Sample Collection Forms. Groundwater temperature ranged from 8.51°C in IW to 11.55°C in MW-1 and MW-4. Conductivity ranged from 1.046 mS in MW-3 to 209.9 mS in IW, and ORP was measured between 12.6 mV in IW and 29.8 mV in MW-4. Groundwater pH ranged from 6.00 in IW to 7.50 in MW-2. A summary of water quality data is included in Table 1, and Water Sample Collection Forms are included in Appendix A.

1.2.2 Groundwater Analytical Results

Analytical results from groundwater samples collected during the March 2009 sampling event show that all of the wells sampled were below laboratory detection limits for BTEX and therefore are below the New Mexico Water Quality Control Commission (WQCC) standards. Each of the monitor wells had TPH concentrations below laboratory detection limits, while IW had total TPH concentrations of 20.5 mg/L. Chloride and TDS concentrations were above laboratory detection limits in each of the samples. The results have been summarized as follows:

- Chloride: IW (140,000 mg/L), MW-1 (37 mg/L), MW-2 (32 mg/L), MW-3 (34 mg/L), and MW-4 (23 mg/L);
- TDS: IW (170,000), MW-1 (660 mg/L), MW-2 (540 mg/L), MW-3 (490 mg/L), and MW-4 (650 mg/L).

Note that the IW sample for TDS was analyzed past the holding time after the initial analysis (within holding times) did not match with the chloride results and was reanalyzed. The analytical results for the groundwater samples collected during the March 2009 sampling event have been tabulated and are presented in Table 2. Groundwater analytical laboratory reports are included in Appendix B.

2.0 Landfarm Soil Sampling

As required by the NMOCD permit for this facility, one random soil sample was collected from each of the active treatment cells. Samples were collected from depths below ground surface of two feet in Cell #1, Cell #2, and Cell # 3. A stainless steel hand auger, which was decontaminated between each sampling point to prevent cross-contamination, was used to collect the samples. Once collected, each sample container was labeled with the date, sample location, sample type, and sampler's initials. The containers were placed in a chilled, insulated cooler at less than 6°C until delivered to Hall in Albuquerque, New Mexico. A Chain of Custody was completed at the time the samples were collected.

2.1 Laboratory Analytical Methods

Soil samples collected were analyzed for the following:

- BTEX per EPA Method 8021B;
- TPH (GRO, DRO, and MRO) per EPA Method 8015B;
- Chlorides per EPA Method 300.0.

Samples collected for BTEX analysis were field-preserved with methanol at the time of collection with materials and equipment supplied by the analytical laboratory.

2.2 Treatment Zone Analytical Results

Results are summarized as follows:

- BTEX concentrations were below laboratory detection limits in each cell;
- TPH-GRO concentrations were below laboratory detection limits in each cell; TPH-DRO concentrations were below detection limits in Cell #1 and Cell #3, and 120 mg/kg in Cell #2. TPH-MRO concentrations were 69 mg/kg in Cell #1, 160 mg/kg in Cell #2, and below the laboratory detection limit of 50 mg/kg in Cell #3;
- Chloride concentrations were below the applicable standard of 500 mg/kg in each of the cells;

The locations of all samples, as well as analytical results, are presented on Figure 2. Laboratory analytical results and are summarized in Tables 3 and 4, and laboratory reports are presented in Appendix B.

3.0 Conclusion and Recommendations

Based upon the results of the March 2009 sampling event associated with the BMG Centralized Surface Waste Management Facility, groundwater analytical results from monitor wells MW-1 through MW-4 located around the Evaporation Pond were below laboratory detection limits for BTEX and TPH.

Soil analytical results from treatment zone monitoring within the landfarm were below laboratory detection limits for BTEX constituents and were below applicable standards for chlorides.

AES has scheduled quarterly treatment zone monitoring and sampling of evaporation pond monitoring wells to occur in June 2009. If you have any questions regarding the sampling procedures or results, please do not hesitate to contact Elizabeth McNally or Ross Kennemer at (505) 564-2281.

Sincerely,

EM for Deborah Watson

Deborah Watson
Project Manager

Elizabeth D. McNally

Elizabeth McNally, PE

Attachments: Table 1. Water Quality and Well Data
Table 2. Summary of Groundwater Analytical Results
Table 3. Soil BTEX and TPH Concentrations
Table 4. Soil Chloride Concentrations
Figure 1. Location of BMG Evaporation Pond and Monitoring Wells
Figure 2. Treatment Zone Monitoring Locations
Appendix A. Water Sample Collection Forms
Appendix B. Laboratory Analytical Reports

Cc: Mike Dimond
Benson-Montin-Greer Drilling Corp.
4900 College Blvd
Farmington NM 87402

Files/2009/BMG/Landfarm Sampling/gcbmg 052909

TABLE 1
Water Quality and Well Data
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Well ID	Date Measured	Top of Casing Elevation (ft amsl)	Depth to Water (ft)	Temp. (°C)	Specific Conduct. (mS)	Dissolved Oxygen (mg/L)	pH	ORP (mV)
Evaporation Pond Water	10-May-08	TBS	NM	12.66	116	NM	6.79	-3.6
Interstitial Well	10-May-08	TBS	9.41	11.82	213	NM	6.60	106.4
Interstitial Well	21-Jul-08	TBS	9.61	18.68	362.7	0.20	6.51	-26.1
Interstitial Well	9-Oct-08	TBS	9.86	19.01	183.7	0.98	6.11	-35.7
Interstitial Well	30-Dec-08	TBS	12.00	NM - LOW YIELD WATER				
Interstitial Well	25-Mar-09	TBS	9.87	8.51	209.9	1.79	6.00	12.6
MW-1	10-May-08	TBS	38.03	12.73	2.59	NM	8.24	76.8
MW-1	21-Jul-08	TBS	38.11	12.18	2.236	4.85	6.57	173.2
MW-1	9-Oct-08	TBS	38.30	12.33	0.978	NM	6.65	45.2
MW-1	30-Dec-08	TBS	38.46	11.80	1.287	NM	6.08	43.6
MW-1	25-Mar-09	TBS	38.60	11.55	1.161	4.36	6.91	20.6
MW-2	10-May-08	TBS	39.16	11.64	0.99	NM	7.78	97.7
MW-2	21-Jul-08	TBS	39.21	11.72	1.632	3.23	6.69	158.4
MW-2	9-Oct-08	TBS	39.37	11.41	0.833	NM	6.74	42.3
MW-2	30-Dec-08	TBS	39.52	11.11	0.995	NM	5.66	51.7
MW-2	25-Mar-09	TBS	39.64	10.94	1.129	4.11	7.50	29.6
MW-3	10-May-08	TBS	38.38	12.80	0.96	NM	7.73	103.2
MW-3	21-Jul-08	TBS	38.49	12.44	1.567	3.69	6.82	184.6
MW-3	9-Oct-08	TBS	38.61	12.60	0.837	NM	6.60	55.2
MW-3	30-Dec-08	TBS	38.77	11.38	0.975	NM	6.76	19.9
MW-3	25-Mar-09	TBS	38.87	11.54	1.046	6.32	7.46	29.2
MW-4	10-May-08	TBS	38.80	12.69	1.09	NM	7.92	78.5
MW-4	21-Jul-08	TBS	38.91	12.38	1.975	NM	7.26	163.3
MW-4	9-Oct-08	TBS	39.10	12.25	0.904	NM	6.58	53.8
MW-4	30-Dec-08	TBS	39.25	11.18	1.097	NM	6.73	25.9
MW-4	25-Mar-09	TBS	39.38	11.55	1.068	5.53	6.72	29.8

NM - Not Measured

TBS - To Be Surveyed

TABLE 2
Summary of Groundwater Analytical Results
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chlorides (mg/L)	TDS (mg/L)
Analytical Method		8021B/8260B				8015B	8015B	8015B	300.0	SM 2540C
New Mexico WQCC		10	750	750	620	NE	NE	NE	NE	NE
Evaporation Pond Water	10-May-08	<10	37	<10	29	2.5	50	12	50,000	89,000
Interstitial Well	10-May-08	<5.0	50	6.8	25	0.56	58	8.0	140,000	220,000
Interstitial Well	21-Jul-08	<5.0	12	<5.0	<10	1.0	8.8	<15	120,000	210,000
Interstitial Well	09-Oct-08	<10	<10	<10	<20	<0.50	<10	<50	100,000	180,000
Interstitial Well	30-Dec-08	NOT SAMPLED - LOW YIELD								
Interstitial Well	25-Mar-09	<10	<10	<10	<20	<0.50	12	8.5	140,000	170,000**
MW-1	10-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	72	740
MW-1	21-Jul-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	64	830
MW-1	09-Oct-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	42	660
MW-1	30-Dec-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	51	730
MW-1	25-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	37	660
MW-2	10-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	49	600
MW-2	21-Jul-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	40	640
MW-2	09-Oct-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	35	550
MW-2	30-Dec-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	33	590
MW-2	25-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	32	540
MW-3	10-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	44	680
MW-3	21-Jul-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	38	610
MW-3	09-Oct-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	36	800
MW-3	30-Dec-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	37	560
MW-3	25-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	490

TABLE 2
Summary of Groundwater Analytical Results
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Well ID	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	GRO (mg/L)	DRO (mg/L)	MRO (mg/L)	Chlorides (mg/L)	TDS (mg/L)
Analytical Method		8021B/8260B				8015B	8015B	8015B	300.0	SM 2540C
New Mexico WQCC		10	750	750	620	NE	NE	NE	NE	NE
MW-4	10-May-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	52	720
MW-4	21-Jul-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	57	770
MW-4	09-Oct-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	34	760
MW-4	30-Dec-08	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	21	650
MW-4	25-Mar-09	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0	23	650

NOTE: NE = Not Established

Note* December 30, 2008, samples were analyzed past the holding times for 8015B Diesel and TDS.
**** Mach 25, 2009 Interstitial Well sample was reanalyzed past the holding time for TDS.**

TABLE 3
Soil BTEX and TPH Concentrations
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Landfarm ID	Sample ID	Sample Location	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylene (mg/kg)	TPH GRO (C6-C10) (mg/kg)	TPH DRO (C10-C22) (mg/kg)	TPH MRO (C22-C32) (mg/kg)
		Laboratory Analytyical Method			8021/8260B				8015M/8015B		
Cell #1	#1	N 36° 23.371' W 106° 52.031'	21-Jun-04	2	<0.025	<0.025	<0.025	<0.050	<20	NA	
Cell #1	#1	N 36° 23.371' W 106° 52.031'	7-Mar-06	2	<0.025	<0.025	<0.025	<0.10	<10	18	
Cell #1	#1	N 36° 23.355' W 106° 51.998'	16-Feb-07	2.5	<0.025	<0.025	<0.025	<0.10	<10	<10	
Cell #1	#1	N 36° 23.372' W 106° 52.046'	22-May-07	3	<0.025	<0.025	<0.025	<0.10	<10	752	
Cell #1	#1	N 36° 23.365' W 106° 52.030'	16-Aug-07	2.5	<0.025	0.031	<0.025	<0.10	<10	660	
Cell #1	#1	N 36° 23.367' W 106° 52.021'	6-Nov-07	2.5	<0.050	<0.050	<0.050	<0.10	<5.0	<10	
Cell #1	#1	N 36° 23.358' W 106° 52.004'	14-Apr-08	2	<0.050	<0.050	<0.050	<0.10	<5.0	4,900	2,200
Cell #1	#1	N 36° 23.375' W 106° 52.056'	21-Jul-08	2	<0.050	<0.050	<0.050	<0.10	5.4	2,000	1,700
Cell #1	#1	N 36° 23.327' W 106° 51.939'	9-Oct-08	2	<0.050*	<0.050*	<0.050*	<0.10*	<5.0	<10	55
Cell #1	#1	N 36° 23.364' W 106° 52.017'	30-Dec-08	1	<0.050	<0.050	<0.050	<0.10	<5.0	39	77
Cell #1	#1	N 36° 23.376' W 106° 52.059'	25-Mar-09	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	69
Cell #2	#1	N 36° 23.386' W 106° 52.932'	21-Jun-04	2	<0.025	<0.025	<0.025	<0.050	<20	NA	
Cell #2	#1	N 36° 23.386' W 106° 52.932'	7-Mar-06	2	<0.025	<0.025	<0.025	<0.10	<10	52	
Cell #2	#1	N 36° 23.393' W 106° 51.996'	16-Feb-07	2.5	<0.025	<0.025	0.03	<0.10	<10	<10	

TABLE 3
Soil BTEX and TPH Concentrations
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Landfarm ID	Sample ID	Sample Location	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylene (mg/kg)	TPH GRO (C6-C10) (mg/kg)	TPH DRO (C10-C22) (mg/kg)	TPH MRO (C22-C32) (mg/kg)
		Laboratory Analytyical Method			8021/8260B				8015M/8015B		
Cell #2	#1	N 36° 23.416' W 106° 52.003'	22-May-07	3	<0.025	<0.025	<0.025	<0.10	<10	<20	
Cell #2	#1	N 36° 23.397' W 106° 51.996'	16-Aug-07	2.5	<0.025	<0.025	0.028	<0.10	<10	<10	
Cell #2	#1	N 36° 23.404' W 106° 51.942'	6-Nov-07	2.5	<0.050	<0.050	<0.050	<0.10	<5.0	<10	
Cell #2	#1	N 36° 23.391' W 106° 51.984'	14-Apr-08	2	<0.050	<0.050	<0.050	<0.10	<5.0	1,000	540
Cell #2	#1	N 36° 23.408' W 106° 52.011'	21-Jul-08	2	<0.050	<0.050	<0.050	<0.10	<5.0	3,000	1,700
Cell #2	#1	N 36° 23.403' W 106° 51.945'	9-Oct-08	2	<0.050*	<0.050*	<0.050*	<0.10*	<5.0	<10	<50
Cell #2	#1	N 36° 23.410' W 106° 52.024'	30-Dec-08	1	<0.050	<0.050	<0.050	<0.10	<5.0	45	81
Cell #2	#1	N 36° 23.372' W 106° 51.952'	25-Mar-09	2	<0.050	<0.050	<0.050	<0.10	<5.0	120	160
Cell #3	#1	N 36° 23.351' W 106° 51.882'	21-Jun-04	2	<0.025	<0.025	<0.025	<0.050	<20	NA	
Cell #3	#1	N 36° 23.351' W 106° 51.882'	7-Mar-06	2	<0.025	<0.025	<0.025	<0.10	<10	NA	
Cell #3	#1	N 36° 23.386' W 106° 51.974'	16-Feb-07	2.5	<0.025	0.034	0.041	<0.10	<10	12	
Cell #3	#1	N 36° 23.359' W 106° 51.865'	22-May-07	3	<0.025	<0.025	<0.025	<0.10	<10	<20	
Cell #3	#1	N 36° 23.340' W 106° 51.574'	16-Aug-07	2.5	<0.025	0.078	0.049	0.18	<10	<10	
Cell #3	#1	N 36° 23.355' W 106° 51.906'	6-Nov-07	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	

TABLE 3
Soil BTEX and TPH Concentrations
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Landfarm ID	Sample ID	Sample Location	Sample Date	Sample Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylene (mg/kg)	TPH GRO (C6-C10) (mg/kg)	TPH DRO (C10-C22) (mg/kg)	TPH MRO (C22-C32) (mg/kg)
		Laboratory Analytyical Method			8021/8260B				8015M/8015B		
Cell #3	#1	N 36° 23.365' W 106° 51.854'	14-Apr-08	2	<0.050	<0.050	<0.050	<0.10	<5.0	1,200	680
Cell #3	#1	N 36° 23.380' W 106° 51.956'	21-Jul-08	2	<0.050	<0.050	<0.050	<1.0	88	7,100	2,400
Cell #3	#1	N 36° 23.365' W 106° 51.843'	9-Oct-08	2	<0.050*	<0.050*	<0.050*	<0.10*	<5.0	<10	<50
Cell #3	#1	N 36° 23.357' W 106° 51.911'	30-Dec-08	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	<50
Cell #3	#1	N 36° 23.330' W 106° 51.868'	25-Mar-09	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	<50
Cell #4	#1	N 36° 23.363' W 106° 51.784'	21-Jun-04	2	<0.025	<0.025	<0.025	<0.050	<20	NA	

*** = Samples were analyzed by per EPA Method 8260B**

Note 3/13/06 TPH for Cell #3 was analyzed past the 14 day hold time. Insufficient sample available for extraction with 8015B QC. Blank and sample from BTEX extraction used.**

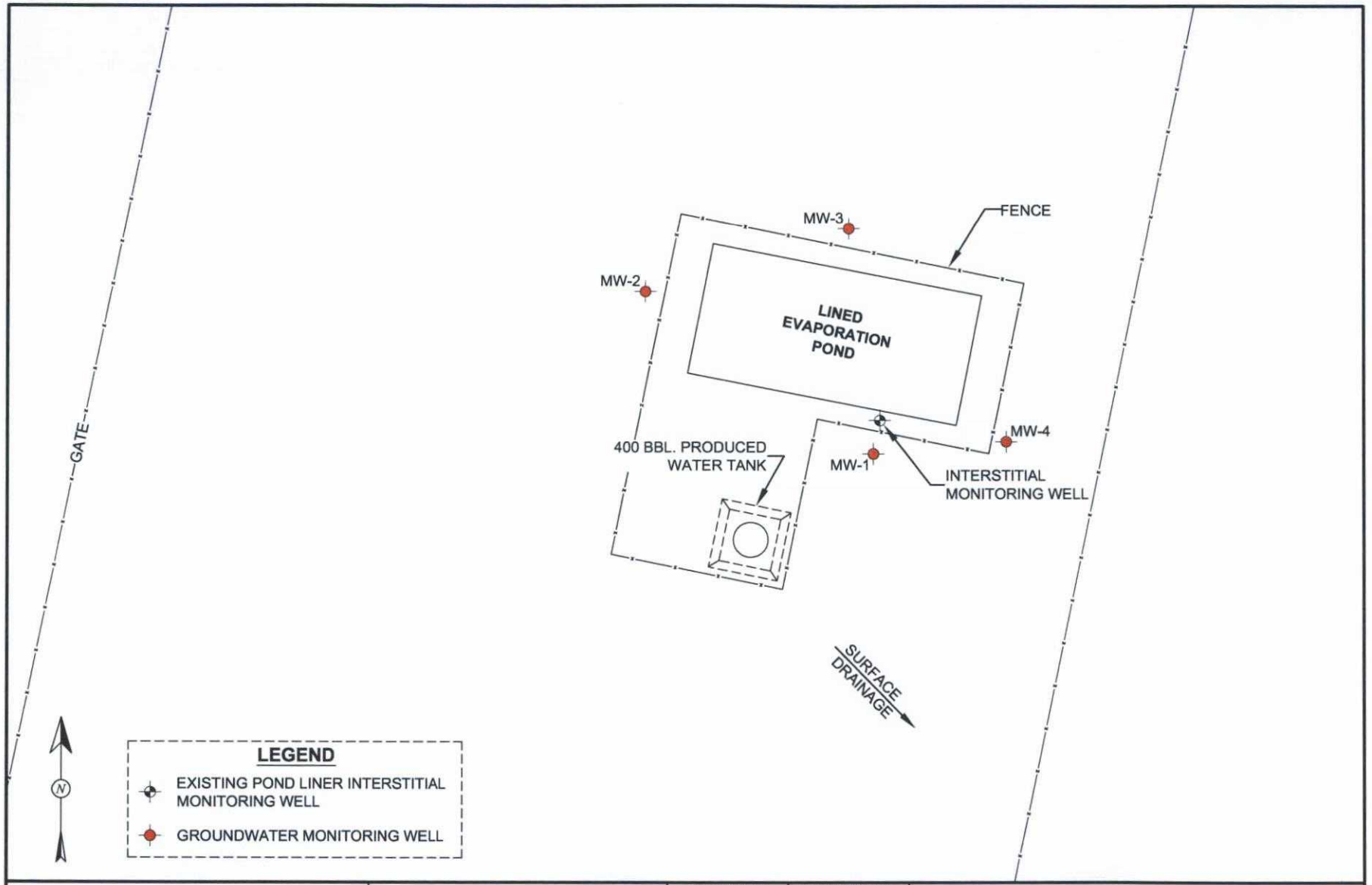
Note 11/28/07 EPA method 8021B was added to sample Cell #2 after the GRO analysis was completed. The BTEX Analysis for this sample does not have a closing QC standard.**

Note Prior to the April 14, 2008, sampling event TPH-DRO was reported as C10-C36.**

TABLE 4
Soil Chloride Concentrations
BMG Centralized Surface Waste Management Facility
Rio Arriba County, New Mexico

Landfarm ID	*Sample ID*	*Sample Date*	*Sample Depth (ft)*	*Chloride (mg/kg)*
	Laboratory Analytical Method			300.0
	NMOCD Soil Standard			500
Cell #1	#1	7-Jun-06	2.5	33.7*
Cell #1	#1	22-May-07	3	23.5
Cell #1	#1	16-Aug-07	2.5	47.7
Cell #1	#1	6-Nov-07	2.5	45
Cell #1	#1	14-Apr-08	2	110
Cell #1	#1	21-Jul-08	2	8
Cell #1	#1	9-Oct-08	2	14
Cell #1	#1	30-Dec-08	1	30
Cell #1	#1	25-Mar-09	2	6
Cell #2	#1	7-Jun-06	2.5	20.4*
Cell #2	#1	22-May-07	3	17.4
Cell #2	#1	16-Aug-07	2.5	5.34
Cell #2	#1	6-Nov-07	2.5	3.3
Cell #2	#1	14-Apr-08	2	2.2
Cell #2	#1	21-Jul-08	2	14
Cell #2	#1	9-Oct-08	2	1.1
Cell #2	#1	30-Dec-08	1	32
Cell #2	#1	25-Mar-09	2	8.3
Cell #3	#1	7-Jun-06	2.5	26.3*
Cell #3	#1	22-May-07	3	57.6
Cell #3	#1	16-Aug-07	2.5	2.86
Cell #3	#1	6-Nov-07	2	7.8
Cell #3	#1	14-Apr-08	2	26
Cell #3	#1	21-Jul-08	2	5.5
Cell #3	#1	9-Oct-08	2	1.4
Cell #3	#1	30-Dec-08	2	4.2
Cell #3	#1	25-Mar-09	2	5.1

Note: * = Concentrations reported are in mg/L
NA = Not Analyzed



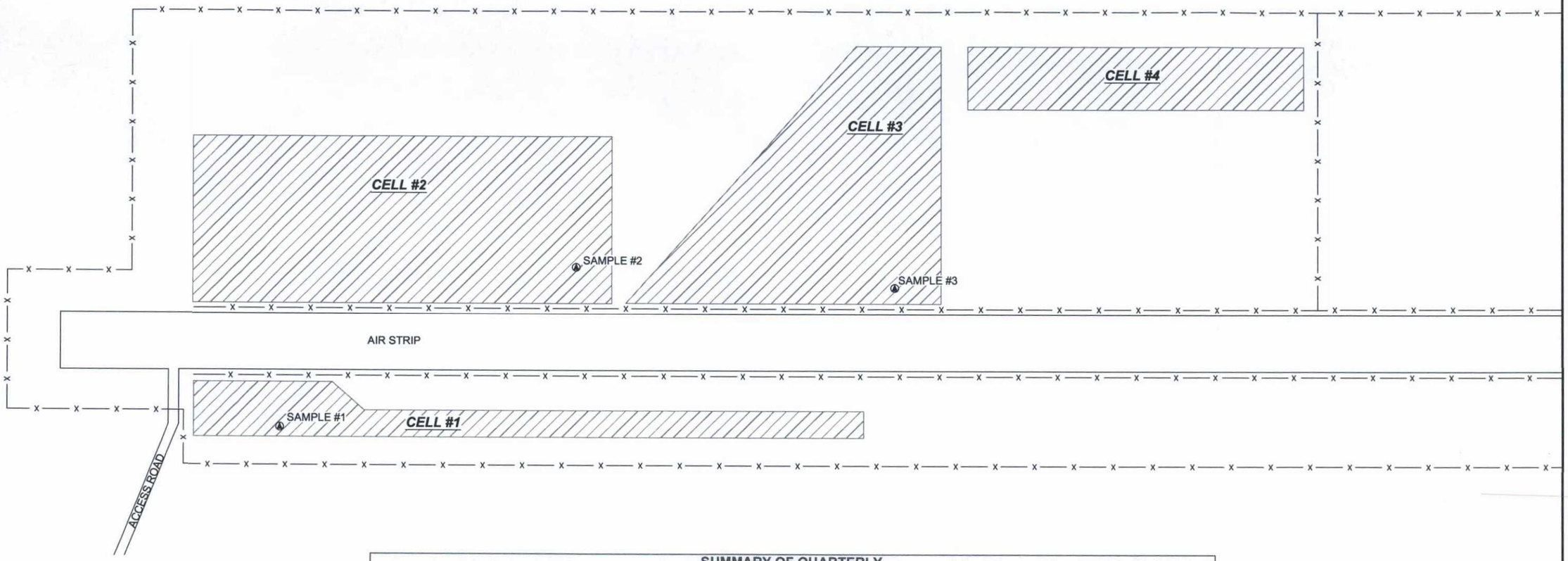
SCALE
50 30 0 50
10
(1 INCH = 50 FEET)

AES
Animas Environmental Services, LLC

DRAWN BY: R. Kennemer	DATE DRAWN: April 28, 2008
REVISIONS BY: N. Willis	DATE REVISED: May 29, 2009
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2009
APPROVED BY: E. McNally	DATE APPROVED: May 29, 2009

FIGURE 1
BENSON-MONTIN-GREER
CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY EVAPORATION POND AND MONITOR WELL LOCATIONS
NW ¼, NW ¼, SEC. 20, T25N, R1E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

S:\ANIMAS 2000\2009 PROJECTS\BMG\LANDFARM\DRAWINGS\FIGURE 1 EVAPORATION POND AND MONITOR WELL LOCATIONS



SUMMARY OF QUARTERLY TREATMENT ZONE MONITORING MARCH 2009

LANDFARM I.D.	SAMPLE I.D.	SAMPLE LOCATION	SAMPLE DATE	SAMPLE DEPTH (ft.)	BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL-BENZENE (mg/kg)	XYLENE (mg/kg)	TPH (GRO, DRO, AND MRO)			Chloride (mg/Kg)
									C6-C10 (mg/kg)	C10-C22 (mg/kg)	C22-C32 (mg/kg)	
CELL #1	#1	N 36°23.376' W 106°52.059'	03/25/09	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	**69**	**6.2**
CELL #2	#2	N 36°23.372' W 106°51.952'	03/25/09	2	<0.050	<0.050	<0.050	<0.10	<5.0	**120**	**160**	**8.3**
CELL #3	#3	N 36°23.330' W 106°51.868'	03/25/09	2	<0.050	<0.050	<0.050	<0.10	<5.0	<10	<50	**5.1**
CELL #4		NOT IN USE, NO SAMPLE	03/25/09									

SCALE
150 90 0 150
30
(1 INCH = 150 FEET)

N

AES
Animas Environmental Services, LLC

DRAWN BY: N. Willis	DATE DRAWN: May 29, 2008
REVISIONS BY: C. Lameman	DATE REVISED: May 29, 2009
CHECKED BY: D. Watson	DATE CHECKED: March 20, 2009
APPROVED BY: E. McNally	DATE APPROVED: May 29, 2009

FIGURE 2
BENSON-MONTIN-GREER CENTRALIZED SURFACE WASTE MANAGEMENT FACILITY MONITORING LOCATIONS MARCH 2009
NW1/4, NW1/4, SEC. 20, T25N, R1E
LLAVES, RIO ARRIBA COUNTY, NEW MEXICO

S:\ANIMAS 2000\2009 PROJECTS\BMG\LANDFARM\DRAWINGS\032509 SAMPLING

Water Sampling Record

Monitor Well No: **MW-1**

Animas Environmental Services

624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project:	BMG Land Farm Sampling	**Project No.:**	
Site:	Evaporation Pond	**Date:**	3-25-09
Location:	Llaves, NM	**Time:**	1241
Sampler:	NW / CL	**Weather:**	Clear
Sampling Method:	Purge	**Air Temperature:**	50°F
Depth of Well (ft):	45.55	**Well Diam. (in.):**	2
Depth to Water (ft):	38.60	**Site Elevation (ft):**	

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1256	11.99	1.169	6.03	7.08	116.8	0.25	
1258	11.55	1.161	4.36	6.91	20.6	1	
1303							Samples Collected
							Due to Low Yield

Analytical Parameters Sampled For (include Method #):

BTEX/GRO/DRO by 8021/8015 (4) 40mL VOAs with HCl and (1) 40mL VOA unpreserved

Chlorides and TDS (1) 500mL poly unpreserved

Disposal of Purged Water:	On asphalt or concrete pavement
Chain of Custody Record Complete? (Y/N)	Yes
Analytical Laboratory:	Hall Environmental Analysis Lab, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level; YSI Water Qualtity Meter;

Other Notes/Comments

Water Sampling Record

Monitor Well No: **MW-2**

Animas Environmental Services

624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project:	BMG Land Farm Sampling	**Project No.:**	
Site:	Evaporation Pond	**Date:**	3-25-09
Location:	Llaves, NM	**Time:**	1333
Sampler:	NW / CL	**Weather:**	Clear
Sampling Method:	Purge	**Air Temperature:**	50°F
Depth of Well (ft):	45.54	**Well Diam. (in.):**	2
Depth to Water (ft):	39.64	**Site Elevation (ft):**	

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1344	11.38	3.102	5.72	7.69	23.7	0.25	
1346	10.94	1.129	4.11	7.50	29.6	0.75	
1351	—	—	—	—	—	—	samples Collected Due to very low yield

Analytical Parameters Sampled For (include Method #):

BTEX/GRO/DRO by 8021/8015 (4) 40mL VOAs with HCl and (1) 40mL VOA unpreserved

Chlorides and TDS (1) 500mL poly unpreserved

Disposal of Purged Water:	On asphalt or concrete pavement
Chain of Custody Record Complete? (Y/N)	Yes
Analytical Laboratory:	Hall Environmental Analysis Lab, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level; YSI Water Qualtity Meter;

Other Notes/Comments

Water Sampling Record

Monitor Well No: **MW-3**

Animas Environmental Services

624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project:	BMG Land Farm Sampling	**Project No.:**	
Site:	Evaporation Pond	**Date:**	3-25-09
Location:	Llaves, NM	**Time:**	1402
Sampler:	NW / CL	**Weather:**	Clear
Sampling Method:	Purge	**Air Temperature:**	50°F
Depth of Well (ft):	45.59	**Well Diam. (in.):**	2
Depth to Water (ft):	38.87	**Site Elevation (ft):**	

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1410	12.28	1.262	7.09	7.81	23.4	0.25	
1413	11.54	1.046	6.32	7.46	29.2	1	
1418	—	—	—	—	—	—	Sample collected
							Due to Low yield

Analytical Parameters Sampled For (include Method #):

BTEX/GRO/DRO by 8021/8015 (4) 40mL VOAs with HCl and (1) 40mL VOA unpreserved

Chlorides and TDS (1) 500mL poly unpreserved

Disposal of Purged Water:	On asphalt or concrete pavement
Chain of Custody Record Complete? (Y/N)	Yes
Analytical Laboratory:	Hall Environmental Analysis Lab, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level; YSI Water Qualtity Meter; and New Disposable Bailer

Other Notes/Comments

Water Sampling Record

Monitor Well No: **MW-4**

Animas Environmental Services

624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project:	BMG Land Farm Sampling	**Project No.:**	
Site:	Evaporation Pond	**Date:**	3-25-09
Location:	Llaves, NM	**Time:**	1203
Sampler:	NW / CL	**Weather:**	Clear
Sampling Method:	Purge	**Air Temperature:**	50°F
Depth of Well (ft):	45.6	**Well Diam. (in.):**	2
Depth to Water (ft):	39.38	**Site Elevation (ft):**	

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1214	13.01	1.152	7.93	7.11	6.8	0.25	
1217	11.96	1.099	6.63	6.90	20.6	1	
1220	11.91	1.087	6.10	6.80	27.5	1	
1223	11.47	1.080	5.99	6.77	29.6	1	
1226	11.87	1.075	5.51	6.74	30.1	1	
1229	11.55	1.068	5.53	6.72	29.8	1	
1234	—	—	—	—	—	—	Samples Collected

Analytical Parameters Sampled For (include Method #):

BTEX/GRO/DRO by 8021/8015 (4) 40mL VOAs with HCl and (1) 40mL VOA unpreserved

Chlorides and TDS (1) 500mL poly unpreserved

Disposal of Purged Water:	On asphalt or concrete pavement
Chain of Custody Record Complete? (Y/N)	Yes
Analytical Laboratory:	Hall Environmental Analysis Lab, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level; YSI Water Qualtity Meter; and New Disposable Bailer

Other Notes/Comments

Water Sampling Record

Monitor Well No: **Interstitial Well**

Animas Environmental Services
624 E. Comanche, Farmington NM 87401
Tel. (505) 564-2281 Fax (505) 324-2022

Project:	BMG Land Farm Sampling	**Project No.:**	
Site:	Evaporation Pond	**Date:**	3-25-09
Location:	Llaves, NM	**Time:**	1314
Sampler:	NW/CV	**Weather:**	Clear
Sampling Method:	No Purge	**Air Temperature:**	50 °F
Depth of Well (ft):	12.10	**Well Diam. (in.):**	12
Depth to Water (ft):	9.87	**Site Elevation (ft):**	

Time	Temp (deg C)	Conductivity (µS) (mS)	DO (mg/L)	pH	ORP (mV)	PURGED VOLUME (gallons)	Notes/Observations
1317	8.51	209.9	1.79	6.00	12.6	0.25	
1322							Samples Collected

Analytical Parameters Sampled For (include Method #):

BTEX/GRO/DRO by 8021/8015 (4) 40mL VOAs with HCl and (1) 40mL VOA unpreserved

Chlorides and TDS (1) 500mL poly unpreserved

Disposal of Purged Water:	On asphalt or concrete pavement
Chain of Custody Record Complete? (Y/N)	Yes
Analytical Laboratory:	Hall Environmental Analysis Lab, Albuquerque, NM
Equipment Used During Sampling:	Keck Water Level; YSI Water Qualtity Meter;

Other Notes/Comments

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, April 20, 2009

Ross Kennemer
Animas Environmental Services
624 East Comanche
Farmington, NM 87401

TEL: (505) 564-2281
FAX (505) 324-2022

RE: BMG Landfarm

Order No.: 0903433

Dear Ross Kennemer:

Hall Environmental Analysis Laboratory, Inc. received 9 sample(s) on 3/27/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc. **Date:** *20-Apr-09*

CLIENT:	Animas Environmental Services
Project:	BMG Landfarm
Lab Order:	0903433

CASE NARRATIVE

Analytical for TDS:

The TDS for interstitial well was initially analyzed within holding time. However, the TDS results did not match with the chloride. The TDS was reanalyzed past the holding time and reported.

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	TRIP BLANK
Lab Order:	0903433	**Collection Date:**	
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-01	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	3/31/2009 9:38:08 PM
Toluene	ND	1.0		µg/L	1	3/31/2009 9:38:08 PM
Ethylbenzene	ND	1.0		µg/L	1	3/31/2009 9:38:08 PM
Xylenes, Total	ND	2.0		µg/L	1	3/31/2009 9:38:08 PM
Surr: 4-Bromofluorobenzene	93.0	65.9-130		%REC	1	3/31/2009 9:38:08 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-1
Lab Order:	0903433	**Collection Date:**	3/25/2009 1:03:00 PM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/30/2009
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/30/2009
Surr: DNOP	115	58-140		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/31/2009 10:08:49 PM
Surr: BFB	83.2	59.9-122		%REC	1	3/31/2009 10:08:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	3/31/2009 10:08:49 PM
Toluene	ND	1.0		µg/L	1	3/31/2009 10:08:49 PM
Ethylbenzene	ND	1.0		µg/L	1	3/31/2009 10:08:49 PM
Xylenes, Total	ND	2.0		µg/L	1	3/31/2009 10:08:49 PM
Surr: 4-Bromofluorobenzene	86.6	65.9-130		%REC	1	3/31/2009 10:08:49 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	37	0.10		mg/L	1	4/8/2009 11:51:35 AM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	660	20		mg/L	1	3/31/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-2
Lab Order:	0903433	**Collection Date:**	3/25/2009 1:51:00 PM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/30/2009
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/30/2009
Surr: DNOP	114	58-140		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/31/2009 10:39:25 PM
Surr: BFB	84.5	59.9-122		%REC	1	3/31/2009 10:39:25 PM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	3/31/2009 10:39:25 PM
Toluene	ND	1.0		µg/L	1	3/31/2009 10:39:25 PM
Ethylbenzene	ND	1.0		µg/L	1	3/31/2009 10:39:25 PM
Xylenes, Total	ND	2.0		µg/L	1	3/31/2009 10:39:25 PM
Surr: 4-Bromofluorobenzene	88.1	65.9-130		%REC	1	3/31/2009 10:39:25 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	32	0.10		mg/L	1	4/8/2009 1:01:14 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	540	20		mg/L	1	3/31/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-3
Lab Order:	0903433	**Collection Date:**	3/25/2009 2:19:00 PM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/30/2009
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/30/2009
Surr: DNOP	121	58-140		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/31/2009 11:09:51 PM
Surr: BFB	86.3	59.9-122		%REC	1	3/31/2009 11:09:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	3/31/2009 11:09:51 PM
Toluene	ND	1.0		µg/L	1	3/31/2009 11:09:51 PM
Ethylbenzene	ND	1.0		µg/L	1	3/31/2009 11:09:51 PM
Xylenes, Total	ND	2.0		µg/L	1	3/31/2009 11:09:51 PM
Surr: 4-Bromofluorobenzene	91.1	65.9-130		%REC	1	3/31/2009 11:09:51 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	34	0.10		mg/L	1	4/8/2009 1:36:02 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	490	20		mg/L	1	3/31/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	MW-4
Lab Order:	0903433	**Collection Date:**	3/25/2009 12:34:00 PM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/30/2009
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/30/2009
Surr: DNOP	121	58-140		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	3/31/2009 11:40:23 PM
Surr: BFB	88.8	59.9-122		%REC	1	3/31/2009 11:40:23 PM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	1.0		µg/L	1	3/31/2009 11:40:23 PM
Toluene	ND	1.0		µg/L	1	3/31/2009 11:40:23 PM
Ethylbenzene	ND	1.0		µg/L	1	3/31/2009 11:40:23 PM
Xylenes, Total	ND	2.0		µg/L	1	3/31/2009 11:40:23 PM
Surr: 4-Bromofluorobenzene	95.7	65.9-130		%REC	1	3/31/2009 11:40:23 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	23	0.10		mg/L	1	4/8/2009 2:45:40 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	650	20		mg/L	1	3/31/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Interstitial Well
Lab Order:	0903433	**Collection Date:**	3/25/2009 1:22:00 PM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	12	1.0		mg/L	1	3/30/2009
Motor Oil Range Organics (MRO)	8.5	5.0		mg/L	1	3/30/2009
Surr: DNOP	107	58-140		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	0.50		mg/L	10	4/2/2009 10:33:20 AM
Surr: BFB	85.1	59.9-122		%REC	10	4/2/2009 10:33:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	10		µg/L	10	4/2/2009 10:33:20 AM
Toluene	ND	10		µg/L	10	4/2/2009 10:33:20 AM
Ethylbenzene	ND	10		µg/L	10	4/2/2009 10:33:20 AM
Xylenes, Total	ND	20		µg/L	10	4/2/2009 10:33:20 AM
Surr: 4-Bromofluorobenzene	84.0	65.9-130		%REC	10	4/2/2009 10:33:20 AM
EPA METHOD 300.0: ANIONS						Analyst: **TAF**
Chloride	140000	500		mg/L	5000	4/14/2009 3:15:19 PM
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	170000	2000	H	mg/L	1	4/16/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Cell #1
Lab Order:	0903433	**Collection Date:**	3/25/2009 10:54:00 AM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-07	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/30/2009
Motor Oil Range Organics (MRO)	69	50		mg/Kg	1	3/30/2009
Surr: DNOP	92.1	61.7-135		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/31/2009 1:17:23 AM
Surr: BFB	94.4	58.8-123		%REC	1	3/31/2009 1:17:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	0.050		mg/Kg	1	3/31/2009 1:17:23 AM
Toluene	ND	0.050		mg/Kg	1	3/31/2009 1:17:23 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/31/2009 1:17:23 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/31/2009 1:17:23 AM
Surr: 4-Bromofluorobenzene	100	66.8-139		%REC	1	3/31/2009 1:17:23 AM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	6.2	0.30		mg/Kg	1	4/9/2009 5:04:26 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Cell #2
Lab Order:	0903433	**Collection Date:**	3/25/2009 11:12:00 AM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-08	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	120	10		mg/Kg	1	3/30/2009
Motor Oil Range Organics (MRO)	160	50		mg/Kg	1	3/30/2009
Surr: DNOP	93.4	61.7-135		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/31/2009 1:47:51 AM
Surr: BFB	92.9	58.8-123		%REC	1	3/31/2009 1:47:51 AM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	0.050		mg/Kg	1	3/31/2009 1:47:51 AM
Toluene	ND	0.050		mg/Kg	1	3/31/2009 1:47:51 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/31/2009 1:47:51 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/31/2009 1:47:51 AM
Surr: 4-Bromofluorobenzene	93.8	66.8-139		%REC	1	3/31/2009 1:47:51 AM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	8.3	3.0		mg/Kg	10	4/9/2009 5:56:39 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *20-Apr-09*

CLIENT:	Animas Environmental Services	**Client Sample ID:**	Cell #3
Lab Order:	0903433	**Collection Date:**	3/25/2009 11:28:00 AM
Project:	BMG Landfarm	**Date Received:**	3/27/2009
Lab ID:	0903433-09	**Matrix:**	MEOH (SOIL)

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/30/2009
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/30/2009
Surr: DNOP	84.2	61.7-135		%REC	1	3/30/2009
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **DAM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/31/2009 2:18:18 AM
Surr: BFB	93.7	58.8-123		%REC	1	3/31/2009 2:18:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: **DAM**
Benzene	ND	0.050		mg/Kg	1	3/31/2009 2:18:18 AM
Toluene	ND	0.050		mg/Kg	1	3/31/2009 2:18:18 AM
Ethylbenzene	ND	0.050		mg/Kg	1	3/31/2009 2:18:18 AM
Xylenes, Total	ND	0.10		mg/Kg	1	3/31/2009 2:18:18 AM
Surr: 4-Bromofluorobenzene	102	66.8-139		%REC	1	3/31/2009 2:18:18 AM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Chloride	5.1	3.0		mg/Kg	10	4/9/2009 6:14:04 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL	Reporting Limit
S	Spike recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: BMG Landfarm **Work Order:** 0903433

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM 2540 C: Total Dissolved Solids									
Sample ID: MB-18856		*MBLK*			Batch ID:	**18856**	Analysis Date:		4/16/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-18856		*LCS*			Batch ID:	**18856**	Analysis Date:		4/16/2009
Total Dissolved Solids	1047	mg/L	20	105	80	120			
Sample ID: LCSD-18856		*LCSD*			Batch ID:	**18856**	Analysis Date:		4/16/2009
Total Dissolved Solids	1047	mg/L	20	105	80	120	0	20	
Method: EPA Method 300.0: Anions									
Sample ID: 0903433-07AMSD		*MSD*			Batch ID:	**18753**	Analysis Date:		4/9/2009 5:39:15 PM
Chloride	21.33	mg/Kg	0.30	101	75	125	3.11	20	
Sample ID: MB-18753		*MBLK*			Batch ID:	**18753**	Analysis Date:		4/9/2009 4:39:44 AM
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-18753		*LCS*			Batch ID:	**18753**	Analysis Date:		4/9/2009 4:57:08 AM
Chloride	15.56	mg/Kg	0.30	104	90	110			
Sample ID: 0903433-07AMS		*MS*			Batch ID:	**18753**	Analysis Date:		4/9/2009 5:21:51 PM
Chloride	20.68	mg/Kg	0.30	96.4	75	125			
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R33159**	Analysis Date:		4/8/2009 11:16:47 AM
Chloride	ND	mg/L	0.10						
Sample ID: MB		*MBLK*			Batch ID:	**R33201**	Analysis Date:		4/10/2009 9:33:04 AM
Chloride	ND	mg/L	0.10						
Sample ID: MB		*MBLK*			Batch ID:	**R33243**	Analysis Date:		4/14/2009 2:40:31 PM
Chloride	ND	mg/L	0.10						
Sample ID: LCS		*LCS*			Batch ID:	**R33159**	Analysis Date:		4/8/2009 11:34:11 AM
Chloride	5.165	mg/L	0.10	103	90	110			
Sample ID: LCS-b		*LCS*			Batch ID:	**R33201**	Analysis Date:		4/10/2009 10:25:19 AM
Chloride	5.184	mg/L	0.10	104	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R33243**	Analysis Date:		4/14/2009 2:57:55 PM
Chloride	5.229	mg/L	0.10	105	90	110			
Sample ID: LCS-b		*LCS*			Batch ID:	**R33243**	Analysis Date:		4/14/2009 3:32:43 PM
Chloride	5.024	mg/L	0.10	100	90	110			
Method: EPA Method 8015B: Diesel Range Organics									
Sample ID: MB-18666		*MBLK*			Batch ID:	**18666**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-18666		*LCS*			Batch ID:	**18666**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	49.06	mg/Kg	10	98.1	64.6	116			
Sample ID: LCSD-18666		*LCSD*			Batch ID:	**18666**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	49.16	mg/Kg	10	98.3	64.6	116	0.208	17.4	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: BMG Landfarm **Work Order:** 0903433

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Diesel Range									
Sample ID: MB-18665		*MBLK*			Batch ID:	**18665**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-18665		*LCS*			Batch ID:	**18665**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	6.364	mg/L	1.0	127	74	157			
Sample ID: LCSD-18665		*LCSD*			Batch ID:	**18665**	Analysis Date:		3/30/2009
Diesel Range Organics (DRO)	5.941	mg/L	1.0	119	74	157	6.88	23	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: MB-18654		*MBLK*			Batch ID:	**18654**	Analysis Date:		3/31/2009 4:50:43 AM
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-18654		*LCS*			Batch ID:	**18654**	Analysis Date:		3/31/2009 2:48:43 AM
Gasoline Range Organics (GRO)	25.88	mg/Kg	5.0	100	64.4	133			
Sample ID: LCSD-18654		*LCSD*			Batch ID:	**18654**	Analysis Date:		3/31/2009 3:19:20 AM
Gasoline Range Organics (GRO)	27.88	mg/Kg	5.0	108	69.5	120	7.44	11.6	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R33032**	Analysis Date:		3/31/2009 8:24:28 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R33070**	Analysis Date:		4/2/2009 8:00:37 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R33032**	Analysis Date:		3/31/2009 6:35:10 PM
Gasoline Range Organics (GRO)	0.5046	mg/L	0.050	101	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R33070**	Analysis Date:		4/3/2009 3:19:09 AM
Gasoline Range Organics (GRO)	0.5306	mg/L	0.050	106	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R33070**	Analysis Date:		4/3/2009 3:49:28 AM
Gasoline Range Organics (GRO)	0.4966	mg/L	0.050	99.3	80	115	6.62	8.39	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Animas Environmental Services
Project: BMG Landfarm **Work Order:** 0903433

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8021B: Volatiles									
Sample ID: MB-18654		*MBLK*			Batch ID:	**18654**	Analysis Date:		3/31/2009 4:50:43 AM
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
Sample ID: LCS-18654		*LCS*			Batch ID:	**18654**	Analysis Date:		3/31/2009 3:49:44 AM
Benzene	1.075	mg/Kg	0.050	106	78.8	132			
Toluene	1.037	mg/Kg	0.050	103	78.9	112			
Ethylbenzene	1.086	mg/Kg	0.050	109	69.3	125			
Xylenes, Total	3.216	mg/Kg	0.10	107	73	128			
Sample ID: LCSD-18654		*LCSD*			Batch ID:	**18654**	Analysis Date:		3/31/2009 4:20:13 AM
Benzene	1.117	mg/Kg	0.050	110	78.8	132	3.83	27	
Toluene	1.059	mg/Kg	0.050	105	78.9	112	2.03	19	
Ethylbenzene	1.129	mg/Kg	0.050	113	69.3	125	3.89	10	
Xylenes, Total	3.327	mg/Kg	0.10	111	73	128	3.40	13	
Method: EPA Method 8021B: Volatiles									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R33032**	Analysis Date:		3/31/2009 8:24:28 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R33032**	Analysis Date:		3/31/2009 7:05:44 PM
Benzene	20.44	µg/L	1.0	102	85.9	113			
Toluene	21.64	µg/L	1.0	108	86.4	113			
Ethylbenzene	20.91	µg/L	1.0	105	83.5	118			
Xylenes, Total	62.94	µg/L	2.0	105	83.4	122			
Method: SM2540C MOD: Total Dissolved Solids									
Sample ID: MB-18698		*MBLK*			Batch ID:	**18698**	Analysis Date:		3/31/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-18698		*LCS*			Batch ID:	**18698**	Analysis Date:		3/31/2009
Total Dissolved Solids	1054	mg/L	20	105	80	120			

Qualifiers:

- E Estimated value
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL Date Received: 3/27/2009

Work Order Number 0903433 Received by: AT

Checklist completed by: _____ 3/27/09 Sample ID labels checked by: _____

Signature Date Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	2°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Animas Environmental Services, LLC

Mailing Address: 624 E. Comanche Farmington, NM 87401

Phone #: 505-564-2281

email or Fax#: 505-324-2022

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: BMG Landfarm

Project #: 040605

Project Manager: Ross Kennemer

Sampler: N. Willis

On Ice: ☒ YES ☐ NO

Sample Temperature: 2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0203133	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TPH C_6-C_{36} by 8015	Chlorides by 300.1	TDS by 2540		Air Bubbles (Y or N)
		H_2O	Trip Blank	2-40mL VOA	HCl	1	X															
3-25-09	1303		MW-1	4-40mL VOA 1-40mL VOA	HCl	2	X											X	X	X		
3-25-09	1351		MW-2	1-500mL plastic	—	3	X											X	X	X		
3-25-09	1419		MW-3			4	X											X	X	X		
3-25-09	1234		MW-4			5	X											X	X	X		
3-25-09	1322		Interstitial Well			6	X											X	X	X		
3-25-09	1054	soil	Cell #1	Methat 2-4oz glass	MeOH	7	X											X	X			
3-25-09	1112		Cell #2			8	X											X	X			
3-25-09	1128		Cell #3			9	X											X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
3-25-09	1815	Nate Willis	Deborah Watson	3-25-09	1815
3-26-09	0840	Deborah Watson		3/26/09	1720

Remarks: NMWQCC Standards

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.